PIGOT. 1661.

AN

Almanack for the year of our LORD GOD, 1661.

Being the first after the Bissextile, or Leap year: And since the Creation, 5610.

Containing many profitable practises, and usefull Tables; As of six in the hundred, of Retailing by the hundred; measuring of timber, stone, board, glasse, &c. by the Foot, also measuring of Cloth, Wainscot, paving and painting by the yard. The making and use of a singular new devised Ruler, and an excellent yard for the same purpose. As also the making and use of a very perfect Water-Level of small charge, newly invented by this Author; With many other things usefull, pleasant and profitable.

Calculated for the Meridian and Latitude of *Cleobury Mortimer*, a Market Town in *Shropshire*. By *Francis Pigot*, Mathematician, inhabitant of the said Parish.

O cœlum immensum, O pulcherrima regia divûm,
Quam pureres: quam perspicua & mirabilis, & quæ
Undiquè syderibus variis ornata venides,
Regia cunctarum plenissima deliciarum, &c.

LONDON,
Printed for the Company of Stationers 1661.

The Dominion of the Moon in Mans body, passing under the 12 Zodaical constellations.

♈ Aries, Head and face.

♉ Taurus, Neck and throat.

♊ Gemini, Armes and shoulders.

♋ Cancer, Breast, stomach, and ribs.

♌ Leo, Heart and back.

♍ Virgo, Belly and Belly.

♎ Libra, Reines and Loynes.

♏ Scorpio, Secret members

♐ Sagitarius, The Thighes

♑ Capricorn, The knees.

♒ Aquarius, The Legges.

♓ Pisces, The feet.

The contents of this ensuing Kalender.

Every page conteins 6 Columns. 1. The daies of the month, in the 2. Seven Letters of the Alphabet, standing for the seven daies of the week, whereof G now being the Dominical Letter. In the 3 Some ancient Festivals expressed for Negotiation and Traffick. In the 4. The Moons place. In the 5. The hour, & minute of the Suns rising. The 6. the hour and minute of Sun setting at Cleobury and thereabouts, which being doubled maketh the length of the day.

Common Notes and movable Feasts.

The Golden Number.	9	Easter day.	April 14
The Dominical Letter.	G	Ascension day.	May 23
The Circle of the Sun.	18	Whitsunday.	June 2
The Epact.	9	Advent Sunday.	Decem. 1
The Roman Indiction	14	Sundaies after Trin.	24

Of the priming of the Moon for ablactation.

THe Moon is said to be Primed when she is three daies and 18 hours old. And it is to be observed, that ancients have delivered for a truth, that such young Cattel as are weaned between the time of the change, and the end of the Prime, viz. untill the Moon be primed as aforesaid, will be subject to yarning and giddiness in the head.

January hath xxxi. dayes.

Full Moon 5 day, at 9 and 20 min. past in the morning.
Last quarter 13 day, 40 min. past 2 in the after noon.
New Moon the 20 day, 20 min. after 2 in the after noon
Firſt quarter 27 day, near 7 in the morning.

1	a	New yea. day	Armes	8	5	3 55
2	b		Should.	8	4	3 56
3	c	Enoch.	Breaſt	8	3	3 57
4	d		and	8	1	3 59
5	e	Edw. Depo.	Stom.	8	0	4 0
6	f	Twelfe day.	Heart	7	59	4 1
7	g	Felix 8 Jan.	Back	7	57	4 3
8	a		Bowels	7	56	4 4
9	b	Paul. Her.	and	7	54	4 6
10	c		Belly	7	53	4 7
11	d	Higinus.	Reines	7	52	4 8
12	e		Loines	7	50	4 10
13	f	Hillary.	Secrets	7	49	4 11
14	g		and	7	47	5 13
15	a		membr.	7	46	4 14
16	b	Marcel.	Thighs	7	44	4 16
17	c		Thighs	7	42	4 18
18	d	Pzisca.	Knees	7	41	4 19
19	e		Knees	7	39	4 21
20	f	Sebaſtian.	Legs	7	37	4 23
21	g	Agnes.	Legs	7	35	4 25
22	a		Feet	7	34	4 26
23	b	Term begin.	Feet	7	32	4 28
24	c	Timothy.	Head	7	30	4 30
25	d	Conver. Paul	Head	7	28	4 32
26	e		Neck	7	26	4 34
27	f	3 ſun. afr. Epi.	Neck	7	25	4 35
28	g	Valerius.	Armes	7	23	4 37
29	a		and	7	21	4 39
30	b	Batild.	Should.	7	19	4 41
31	c		Breaſt	7	17	4 43

A neceſſary Table ſhewing the Circle of the Sun, & Dominical Letter for 15. yeares to come.

Anno	Cir.	☉	Do. Let.
1661	18	F	
62	19	E	
63	20	D	
64	21	C	D
65	22	A	
66	23	G	
67	24	F	
68	25	H	D
69	26	C	
70	27	B	
71	28	A	
72	01	G	F
73	02	E	
74	03	D	
75	04	C	

February hath xxviii. dayes.

Full Moon the 4 day, about 4 in the morning.
Last quarter 12 day, 30 min past 6 in the morning.
New moon 19 day about midnight.
First quarter 25 day, near 8. at night.

1	D	Wildgat.	Breakf.	7 15	4 45	Anno Dom.	Easter day.
2	E	Purification.	Neast	7 13	4 47		
3	F	Gilbert.	and	7 11	4 49	1661	April 14
4	G		Bath	7 9	4 51	62	March 30
5	A	Agatha.	Bewsie	7 7	4 53	63	April 19
6	b	Amand.	Belly	7 5	4 55	64	April 10
7	c		Being	7 4	4 56	65	March 26
8	D	Apolon.	and	7 2	4 58	66	April 15
9	E	Scholast.	Logus	7 0	5 0	67	April 7
10	F	Septuagesima.	Secret	6 58	5 2	68	March 22
11	G		Numb.	6 56	5 4	69	April 11
12	A	Terme ends.	Thighs	6 54	5 6	70	April 3
13	b		Thighs	6 52	5 8	71	April 23
14	c	Valentine.	Knees	6 49	5 11		
15	D	Faustine	Knees	6 47	5 13		
16	E	Julian	Legs	6 45	5 15	By this Table you may see the rising and falling of Easter for 11 years to come.	
17	F	Sexagel.	Legs	6 43	5 17		
18	G		Feet	6 41	5 19		
19	A	Willred.	Feet	6 39	5 21		
20	b		Head	6 37	5 23		
21	c	Ember-Wed.	Head	6 35	5 25		
22	D	Polycarp.	Neck	6 33	5 27		
23	E		Neck	6 31	5 29		
24	F	Shrove Sund.	Armes	6 29	5 31		
25	G		and	6 27	5 33		
26	A		Should.	6 25	5 35		
27	b	Ash-wednesd.	Breast	6 23	5 37		
28	c	Romain.	Stem.	6 20	5 40		
		Dies Cinerum.		Sun rif.	Sun set.		
		Wed.					

March hath xxxi. dayes.

Full Moon 5 day, 30 min. past 10 at night.
Last quar. 13 day, near 6 in the afternoon.
New Moon 20 day, 30 min. after 9 in the morning.
First quarter 27 day, at 11 before noon.

1	D	David	Heart	6	18	5	42	The Nobil. of En-
2	e	Cadwal B.	Back	6	16	5	44	gland as they were
3	f	1 sun. in Lent.	Back	6	14	5	46	in the year, 1638.
4	g		Bowels	6	12	5	48	
5	a	Eusebius	Belly	6	10	5	50	Dukes
6	b		Reines	6	8	5	52	Richmond,
7	c	Victor.	and	6	6	5	54	2
8	d		Loyns	6	4	5	56	Buckingham,
9	e		Secret	6	2	5	58	
10	f	2. sun. in Lent	Womb.	6	0	6	0	1 Marquels,
11	g		Thighs	5	58	6	2	
12	a	Gregory	Thighs	5	56	6	4	Winchester,
13	b	Theodora.	Knees	5	54	6	6	
14	c		Knees	5	52	6	8	Earls.
15	d	Longius	Ankles	5	50	6	10	
16	e		Legs	5	48	6	12	1. Arundel and
17	f	3. sun. in Lent	Legs	5	45	6	15	Surry.
18	g		Feet	5	43	6	17	2. Oxford,
19	a	Joseph.	Feet	5	41	6	19	3 Northumberland
20	b	☉ Eclipsed.	Head	5	39	6	21	4. Shrewsbury.
21	c	Benedictus.	Head	5	37	6	23	5. Kent.
22	d		Neck	5	35	6	25	6 Darby.
23	e	Polycarp.	Neck	5	33	6	27	7. Worcester.
24	f	4. sun. in Lent.	Arms	5	31	6	29	8. Rutland.
25	g	Annun. Mary.	Shoul.	5	29	6	31	9. Cumberland.
26	a	Cuthb.	Breast	5	27	6	33	10. Suffex.
27	b		and	5	24	6	36	11. Huntingdon.
28	c		Stom.	5	22	6	38	12. Bath.
29	d	Eustach.	Heart	5	20	6	40	13. Southampton.
30	e		Back	5	18	6	42	14. Bedford.
31	f	5. sun. in Lent	Bowels	5	16	6	44	15. Pembrook.

April hath xxx. daies.

Full Moon 4 day, 30 min. after 3 in the afternoon.
Last quarter 12 day, 20 min. past 3 in the morning.
New Moon 18 day near 7 at night.
First quarter 26 day about 4 in the morning.

1	g		and	5 15	6 45	
2	a	Richard.	Belly.	5 13	6 47	Earls.
3	b	Ambrose.	Reins	5 11	6 49	
4	c		Loines	5 9	6 51	16 Hartford
5	d		Secret	5 7	6 53	17. Essex.
6	e	Sexcus.	Memb.	5 5	6 55	18. Lincoln.
7	f	Palm Sund.	Thighes	5 3	6 57	19. Nottingam
8	g		Thighs	5 1	6 59	20 Suffolk.
9	a	Perpetuus.	Thighes	4 59	7 1	21. Dorset.
10	b		Knees	4 57	7 3	22. Salisbury.
11	c	Julius.	Knees	4 55	7 5	23. Exeter.
12	d		Legs	4 53	7 7	24. Somerset.
13	e		Legs	4 51	7 9	25. Bridgewater.
14	f	Easter day.	Fat	[illegible]	7 11	26. Leicester.
15	g	Euphenia.	Fat	[illegible]	7 12	27. Northampton.
16	a	Isidore.	Head	4 46	7 14	28. Warwick.
17	b	Cosmi.	Head	4 44	7 16	29. Devonshire.
18	c		Neck	4 43	7 17	30. Cambridge.
19	d	Alphage.	Neck	4 41	7 19	31. Marach.
20	e		Armes	4 39	7 21	32. Carlile.
21	f	Low Sunday.	Should	4 37	7 23	33. Denby.
22	g		Breast	4 35	7 25	34. Bristol.
23	a	St George.	Stom.	4 34	7 26	35. Middlesex.
24	b		Ribs	4 32	7 28	36. Anglesey.
25	c	Mark Evan.	Heart	4 30	7 30	37 Holland.
26	d		Back	4 28	7 32	38. Clare.
27	e	Anastasius.	Bowels	4 27	7 33	39. Bullinbrook.
28	f	2 aft. Easter.	Bowels	4 25	7 35	40. Westmorland
29	g		Belly	4 23	7 37	41. Manchester.
30	a	Erkenwald.	Reines	4 22	7 38	42. Barkshire.

May hath xxxi dayes.

Full Moon 4 day, 40 min. past 5 in the morning.
Last quarter 11 day, about 8 in the morning.
New Moon 18 day, 20 min. past 4 in the morning.
First quarter 25 day at 9 at night.

1	b	Philip & Jac.	Lolnes	4 20	7 40		
2	c		Secrets	4 18	7 42		Earls.
3	d	Inven. Cru.	and	4 16	7 44		
4	e		Wemb.	4 15	7 45	43.	Cleveland.
5	f	5 after Easter.	Chiches	4 13	7 47	44.	Mulgrave.
6	g		Chiches	4 12	7 49	45.	Dudley.
7	a	John Evv.	Innes	4 10	7 50	46.	Monmouth.
8	b		Innes	4 8	7 52	47.	Marlborough.
9	c		Lege	4 7	7 53	48.	Rivers.
10	d	Theodote.	Legs	4 6	7 54	49.	Lindsey.
11	e		Fest	4 4	7 56	50.	Newcastle.
12	f	Cantate	Fest	4 3	7 57	51.	Dover.
13	g	Theodote.	Hend	4 2	7 58	52.	Peterborough.
14	a		Hend	4 1	7 59	53.	Scanford.
15	b		Fast	4 0	8 0	54.	Winchester.
16	c	Brandon.	Hock	3 59	8 1	55.	Kingston.
17	d		Hock	3 58	8 2	56.	Carnarvon.
18	e	Dunstan.	Nemes	3 57	8 3	57.	Newport.
19	f	Rogat. Sund.	Should.	3 55	8 5	58.	Chesterfield.
20	g		Wrast	3 54	8 6	59.	Thanet.
21	a	Julian.	Atom	3 53	8 7	60.	St Albans.
22	b		Heart	3 52	8 8	61.	Portland.
23	c	Ascen. day.	and	3 51	8 9		
24	d	Francis.	Hock.	3 50	8 10		Viscounts.
25	e		Bowels	3 49	8 11	1.	Mountague.
26	f	6 after Easter	Holy	3 48	8 12	2.	Purbeck.
27	g	Term ends.	Rains	3 47	8 13	3.	Say and Seal.
28	a		and	3 46	8 14	4.	Wimbleton.
29	b	Nat. P. Charls.	Loyns	3 44	8 14	5.	Savage.
30	c		Secret	3 45	8 15	6.	Conway.
31	d		Wemb.	3 44	8 16	7.	Baning.

June hath xxx. dayes.

Full Moon the 2 day at 5 in the afternoon.
Last quarter 9 day, 24 min. after 1 after noon.
New Moon 16 day, at 3 in the afternoon.
First quarter 24 day, about 3 in the after noon.

1	e	Nichomede.	Thighs	3	44	8	16	
2	f	Whitsunday.	Thighs	3	44	8	16	8. Cambden.
3	g		Knees.	3	43	8	17	9. Wentworth.
4	a		Knees	3	43	8	17	
5	b		Legs	3	43	8	17	Barons.
6	c	Melone.	Legs	3	42	8	18	
7	d		Legs	3	42	8	18	1. Aburgavenny.
8	e	Medard.	Feet	3	42	8	18	2. Audley.
9	f	Trin. sund.	Feet	3	42	8	18	3 Delaware.
10	g		Head	3	42	8	18	4. Barkley.
11	a		Head	3	42	8	18	5 Morley.
12	b		Neck	3	42	8	18	6. Dacres.
13	c	Corpus.	Neck	3	42	8	18	7. Dudley.
14	d	Terme begin	Brines	3	42	8	18	8 Sturton.
15	e		Should.	3	42	8	18	9. Vaux.
16	f	1. sun. aft. Trin	Breast	3	43	8	17	10. Winsor.
17	g		Stom.	3	43	8	17	11. Cromwell.
18	a		Ribs	3	43	8	17	12. Evere.
19	b		Heart	3	44	8	16	13. Wharton.
20	c		Back	3	44	8	16	14 Willoughby.
21	d	Walbridge.	Bowels	3	44	8	16	15. Paget.
22	e		and	3	45	8	15	16. North.
23	f	Etheldred.	Belly	3	46	8	14	17. Shandos.
24	g	S. John Bapt.	Reines	3	46	8	14	18. Peter.
25	a		Loins	3	47	8	13	19. Gerard.
26	b		Secret	3	48	8	12	20. Spencer.
27	c	Crescens.	Wemb.	3	49	8	11	21. Stanhope.
28	d		Thighs	3	50	8	10	22. Arund of War-
29	e	S. Peter.	Thighes	3	51	8	9	der.
30	f	3. sun. aft. Trin	Thighes	3	51	8	9	23. Tenham.

July hath xxxi. dayes.

Full Moon 2 day, about 2 in the morning.
Last quarter 8 day, near 7 at night.
New Moon the 16 day, 20 min. after 3 in the morning.
First quarter 24 day, about 7 in the morning.

1	g	Theobald.	Knees	3	52	8	8		
2	a	Visi. Mar.	Knees	3	53	8	7		Barons.
3	b	Term ends.	Legs	3	54	8	6		
4	c		Legs	3	55	8	5	24	Brook.
5	d	Anselmus.	Feet	3	57	8	3	25	Mountague.
6	e		Feet	3	58	8	2	26	Gray.
7	f	4 sun. aft. Trin	Head	3	59	8	1	27	Dainscourt.
8	g		Head	3	0	8	0	28	Robert.
9	a	Cyrillus.	Neck	4	1	7	59	29	Craven.
10	b		Neck	4	2	7	58	30	Faulkenbridge.
11	c		Armes and	4	3	7	57	31	Lovelace.
12	d			4	4	7	56	32	Paulet.
13	e	Margaret.	Should	4	6	7	54	33	Harvey.
14	f	5. sun. aft. Trin	Breast	4	7	7	53	34	Brudenel.
15	g		Stom.	4	9	7	51	35	Maynard.
16	a	Osmond.	Heart	4	10	7	50	36	Coventry.
17	b		Back	4	11	7	48	37	Howard.
18	c	Rolling.	Bowels and	4	14	7	46	38	Goring.
19	d			4	15	7	45	39	Mohun.
20	e	Margaret.	Belly	4	17	7	43	40	Sevil.
21	f	6. sun. aft. Trin	Reines	4	19	7	41	41	Dunsmore.
22	g		Loines	4	21	7	39	42	Powis.
23	a		Secrets and	4	23	7	37	43	Herbert.
24	b			4	24	7	36	44	Cottington.
25	c	S James.	memb	4	25	7	35		
26	d		Thighs	4	27	7	33	The West Saxon Alured divided England into shires, and Henry the eighth did the	
27	e	Martha.	Thighs	4	28	7	32		
28	f	7. sun. aft. Trin	Knees	4	30	7	30		
29	g		Knees	4	32	7	28		
30	a	Abdon Mar.	Legs	4	34	7	26		
31	b		Legs	4	36	7	24		

Auguſt hath xxxI dayes.

Laſt quarter 7 day, a little paſt 1 in the morning.
New moon 14 day at 6 in the after noon.
Firſt quarter 22 day, about 10 at night.
Full Moon 29 day, near 6 in the afternoon.

1	c	Lammas.	Feet	4 38	7 22	ſame with Wales.
2	d	Stephen.	Feet	4 40	7 20	
3	e		Head	4 42	7 18	The names of the
4	f	Juſtine.	Head	4 43	7 17	ſaid ſhiers, and
5	g	Gower Con.	Neck	4 45	7 15	their diſtances from
6	a		Neck	4 47	7 13	*London* to the heart
7	b		Armes	4 49	7 11	or middle of every
8	c	Ciriak.	and	4 51	7 9	of the ſame ſhiers.
9	d		Should.	4 53	7 7	
10	e	Lawrence.	Breaſt.	4 54	7 6	Shiers. miles.
11	f	9 ſun. af. Trin.	Stom.	4 55	7 5	1. Barkſhire. 040
12	g	Clare vir.	Heart	4 57	7 3	2 Bedfordſhire. 040
13	a		and	4 59	7 1	3. Buckingham. 035
14	b		Back	5 1	6 59	4. Cambridge. 050
15	c	Aſſum. Mar.	Bowels	5 3	6 57	5 Cheſhire. 135
16	d	Rochus.	Belly	5 5	6 55	6. Cornwall. 200
17	e		Reins	5 7	6 52	7. Cumberland 205
18	f	Helena.	and	5 10	6 50	8. Darbyſhire. 105
19	g	Ludovic.	Loyns	5 12	6 49	9. Devonſhire. 155
20	a		Secret	5 13	5 47	10. Dorſetſhire. 095
21	b	Bernard.	Womb.	5 15	6 45	11. Durham. 180
22	c		Thighes	5 17	6 43	12. Eſſex. 025
23	d	Zacheus.	Thighs	5 19	6 41	13. Gocesterſh 080
24	e	Barthol. Apo.	Knees	5 21	6 39	14. Hampſhire. 051
25	f	11. after Trin.	Knees	5 23	6 37	15. Hartfordſh. 025
26	g	Zepherine.	Knees	5 25	6 35	16. Herefordſh. 100
27	a		Legs	5 27	6 33	17. Hunting. 050.
28	b	Dog day end.	Legs	5 29	6 31	18. Kent. 026
29	c		Feet	5 31	6 29	19. Lancaſhire. 153
30	d		Feet	5 34	6 26	20 Leiceſterſh. 072
31	e	Cutburge.	Head	5 36	6 24	21. Lincolnſh. 090

September hath xxx dayes.

Last quar. 5 day, at 11 before noon.
New Moon 13 day, about 11 before noon.
First quarter 21 day, about 10 in the morning.
Full Moon 28 day, about 3 in the morning.

1	f	Giles Abb.	Head	5 38	6 22	22. Middlesex.	008
2	g		Neck	5 40	6 20	23. Notting.	095
3	a	Seraphia.	Neck	5 42	6 18	24. Northamp.	052
4	b	Gregory.	Arms	5 44	6 16	25. Northum.	210
5	c		Shold.	5 46	6 14	26. Norfolk.	072
6	d		Breast	5 48	6 12	27. Oxfordsh.	045
7	e	Nat. Qu. Eliz.	Stom.	5 50	10	28. Rutlandsh.	070
8	f	Nativ. Mary.	Heart	5 52	6 8	29. Shropshire.	120
9	g		and	5 54	6 6	30. Somersetsh.	102
10	a	Hilarius.	Back	5 56	6 4	31. Staffordsh.	110
11	b		Bowels	5 58	6 2	32. Suffolk.	045
12	c	Prothus.	Belly	6 0	6 1	33. Sussex.	025
13	d		Reines	6 2	5 58	34. Surrey.	002
14	e	Exal. Crue.	and	6 3	5 57	35. Warwicksh.	075
15	f	14 after Trin.	Loyns	6 5	5 55	36. Westmorl.	185
16	g	Lambert.	Secret	6 7	5 53	37. Wiltshire.	072
17	a		Memb.	6 9	5 51	38. Worcester.	092
18	b	Hugh.	Thighs	6 11	5 49	39. Yorkshire.	145
19	c		Thighs	6 13	5 47	40. Anglesea.	185
20	d	Fausta.	Thighes	6 15	5 45	41. Brecknock.	130
21	e	Matth Apost	Knees	6 17	5 43	42. Cardigan.	135
22	f	15 after Trin.	Knees	6 19	5 41	43. Cardnarth.	154
23	g		Knees	6 21	5 39	44. Carnarvon.	175
24	a		Legs	6 23	5 37	45. Denbysh.	160
25	b		Feet	6 25	5 35	46. Flintshire.	150
26	c	Cyprian.	Feet	6 27	5 33	47. Glamorg.	130
27	d		Head	6 29	5 31	48. Mongomer.	135
28	e		Head	6 31	5 29	49. Monmouth.	100
29	f	Michael Arch.	Neck	6 34	5 26	50. Merionet.	160
30	g		Neck	6 35	5 25	51. Pembrook.	180

October hath xxxi. dayes.

Last quarter 4 day, at midnight.
New Moon 13 day near 4 in the morning.
First quarter 20 day near 9 at night.
Full Moon 27 day, about 1 in the afternoon.

1	a	Remigius.	Arnes	6 37	5 23	53. Radnor.	130
2	b		Should.	6 39	5 21		
3	c		Breast	5 41	5 19	Baronets were first	
4	d	Francis.	and	6 43	5 17	created by King	
5	e		Stom.	6 45	5 15	*James*, and contin-	
6	f	Fides.	Heart	6 47	5 13	ued by *Charles*;	
7	g		Back	6 49	5 11	they are heredita-	
8	a	Pelagius.	Bowels	6 51	5 0	y dignities.	
9	b		and	6 54	5 6		
10	c		Belly	6 56	5 4	Knights of the Gar-	
11	d	Burchard.	Reins	6 58	5 2	ter, instituted by	
12	e		Loins	6 59	5 1	King *Edward* the	
13	f	Edw. Tra.	Secret	7 2	4 58	third, and are 26	
14	g		and	7 4	4 56	in number. The	
15	a	Wolfran.	Womb.	7 6	4 54	Ensigne is a Blew	
16	b		Thighes	7 8	4 52	Garter buckled on	
17	c		Thighes	7 10	4 50	the left legion wch	
18	d	St. Luke.	Knees	7 12	4 48	these words are	
19	e	Vulfr. Win.	Knees	7 14	4 46	embroidered, *Hon*	
20	f	Aetiola.	Legs	7 16	4 44	*soit qui mal y pense*:	
21	g		Legs	7 18	4 42	about their necks	
22	a		Feet	7 19	4 41	they wear a blew	
23	b	Terme begin	Feet	7 21	4 39	ribband, at the end	
24	c		Feet.	7 23	4 37	of which hangs the	
25	d		Head	7 25	4 35	picture of St. *Geo.*	
26	e		Head	7 27	4 33	on whose day they	
27	f	Evan. John.	Neck	7 29	4 31	are installed.	
28	g	Simon & Jude	Neck	7 31	4 29	Knights of the Bath	
29	a		Arms	7 32	4 28	brought into Eng.	
30	b		Should.	7 34	4 26	by *Hen.* 4. 1399 they	
31	c		Breast	7 36	4 24	are created only at	

November hath xxx. dayes.

Laſt quarter 3 day, about 5 at night.
New Moon 11 day, at 10 at night.
Firſt quarter 19 day about 4 in the morning.
Full Moon 25 day, near midnight.

1	d	All Saints.	Stom.	7 37	4 23	the coronation of
2	e	All Soules	Heart	7 39	4 21	K. and Q. and the
3	f	21. after Trin.	Back.	7 41	4 19	inſtallation of the
4	g	Amunting.	Bowels	7 43	4 17	P. of *Wales*, & wear
5	a	Powd. Treaſ.	and	7 44	4 16	about their necks
6	b	Leonard.	Belly	7 46	4 14	carnation ribband.
7	c	Clouding.	Reins	7 48	4 12	The union of the
8	d		Loyns	7 49	4 11	Scottiſh Families.
9	e		Secret	7 51	4 9	Great contention
10	f	Theophilus	and	7 52	4 8	for the Kingdome
11	g	Martinus.	Womb.	7 53	4 7	of Scotl. betwixt
12	a		Thighes	7 54	4 6	the *Baliols* and the
13	b		Thighes	7 56	4 4	*Bruſes*, for 84 years
14	c	Ethenwald.	Knees	7 57	4 3	but afterward un-
15	d		Knees	7 59	4 1	ted in the perſon
16	e	Edmond.	Knees	8 0	4 00	of *Robert Steuart*,
17	f	Geleſius.	Legs	8 2	3 58	who married the
18	g		Legs	8 3	3 57	eldeſt Siſter of *Da-*
19	a		Feet	8 4	3 56	*vid Bruſe*, and the
20	b		Feet	8 6	3 54	heirs of that Fami-
21	c	Cecilia.	Head	8 7	3 53	ly, he himſelf being
22	d	Clemens.	Head	8 8	3 52	heir unto the *Bali-*
23	e		Neck	8 9	3 51	*oſs*, 137.
24	f	Katherine.	Neck	8 10	3 50	The like in Engl.
25	g		Armes	8 11	3 49	betwixt *York* and
26	a		Should.	8 12	3 48	*Lancaſter*, wherein
27	b		Wraſt	8 13	3 47	were fought ſeven-
28	c	Terme ends.	Stom.	8 14	3 46	teen pitcht fields,
29	d		Heart	8 14	3 46	in which there pe-
30	e	Andrew.	Back.	8 15	3 45	riſhed 8. Kings, &
						Princes.

December hath xxxi dayes.

Last quarter 3 day, at 2 in the afternoon.
New Moon 11 day, about 2 after noon.
First quarter 18 day, neer 3 in the after noon.
Full Moon the 25 day at 1 in the afternoon.

1	F	Lop. Bishop.	Wash.	8	15	3 45	forty Dukes, Mar-
2	g	Candlem.	Bells	8	16	3 44	quesses and Earls,
3	a		Bowels	8	16	3 44	200000 of the com-
4	b	Barbara.	Rains	8	17	3 43	mon people, beside
5	c		and	8	18	3 43	Bar. and Gent. But
6	d	Nicholaus.	Long	8	18	3 42	it was compoſed by
7	e		Secret	8	18	3 42	*Hen.* 7. heir of the
8	f	Concep M.	Womb.	8	18	3 42	houſe of *Lanc.* who
9	g	Joachimus.	Thighs	8	18	3 42	married *Elizabeth*,
10	a		Thighs	8	18	3 42	daughter and heir
11	b		Thighs	8	18	3 42	unto K. *Edw.* the
12	c		Knees.	8	18	3 42	4th of the houſe of
13	d	Lucia.	Knees	8	18	3 41	*York*, *Anno*, 1485.
14	e		Legs	8	18	3 42	Of the union be-
15	f	Nicolaus.	Legs	8	18	3 42	tween *England* and
16	g	O ſapientia.	Feet	8	17	3 43	*Scotland*, in the
17	a		Feet	8	17	3 43	perſon of K. *James*,
18	b		Head	8	17	3 43	the firſt King of
19	c	Gracian.	Head	8	16	3 44	*Scotland*, who as
20	d		Neck	8	16	3 44	heir unto *Margaret*
21	e	S Thomas.	Neck	8	15	3 45	eldeſt daughter
22	f		Armes	8	15	3 45	unto *Henry* the ſe-
23	g	Victor bir.	and	8	14	3 46	venth, was admit-
24	a		Should.	8	13	3 47	ted to the Engliſh
25	b	Chriſt born.	Breaſt	8	13	3 47	Throne, after the
26	c	St. Stephen.	Stom.	8	12	3 48	death of Queen *E-*
27	d	St. John.	Heart	8	11	3 49	*lizabeth*, *An.* 1602.
28	e	Innocents.	Wach	8	10	3 50	and made of two
29	f		Bowels	8	9	3 51	Kingdoms but one
30	g		and	8	8	3 52	Monarchy.
13	a	Silveſter.	Belly	8	7	3 53	

Of the Epact, and how to find the Moons age.

AS the annuall circuit of the Moon, every year commeth 11 dayes too short of the Sun by eleven daies, so by adding these elevens yearly one to another, and casting away thirty, the remainder is called the Epact, which taketh its beginning yearly the first day of March.

To know the age of the Moon by the said Epact.

ADd unto the said Epact the number of months, from the beginning of March, together with the month wherein you seek, and also the number of daies past of that same month wherein you seek, and the sum of this addition will yield you the just age of the Moon. As for Example. I would know the age of the Moon the seventeenth day of January, 1659. The Epact is 17, the number of months 11. the daies of the month wherein you seek, 17. which added, make 45. whereof 30. substracted, there remaineth 15. the just age of the Moon that very day, and this Addition or Change of the Epact begins the first of March.

The 20. day of March 1661. about 9. in the morning, the Sun will be eclipsed. And the 28. of September about three in the morning, the Moon will be eclipsed.

AERIS Mutatio.

PRedictions of the weather are found to be so various and uncertaine; especially in an Island, as England, Scotland and Ireland, because in one day so many sorts of weather. For the vaporous mixture of the Sea, and the mutabilitie of the winds, permit no certainty (as experience daily teacheth;) And often commeth an unexpected wind, yet none knoweth from whence it commeth, or whether it goeth: and carries that spungy Nubes into a far remote Climate, and so the Predictor is deluded, and reputed but a Mend--ax, though never good Smith in his life. So concluding with *Cato*; *Mitto arcana Deo*, &c.

Of the division of the whole earth.

The Earth is divided into four principall parts, *viz.* Europa, Asia, Africa, and America.

Europa contains twelve Provinces.

America.
Italy.
France.
Spain.
Denmark.
Norway.
Swedeland.
Moscovia.
Polonia.
Hungaria.
Clavonia
and Grecia, and hath 8 Ilands.

Asia into China, Persia, part of Moscovia and Tartaria

Africa is bounded with the midland Sea, and the red Sea, and hath six Provinces.
Egypt.
Barbaria.
Æthiopia.
Nubia.
Abissmies.
Atonomotopa.

America hath two parts, Mexicana & Parvana.

The names of the Seas.
1. Ocean Sea.
2. Mediterraneum.
3. Mare Majore.
4. Caspium mare.
5. East Indian Sea
6. Red Sea.
7. Persian Sea.
8. South Sea.
9. Narrow Sea.

A Table shewing the Moons comming to South every day of her age, according to her mean motion, and to know the hour of the night by the moon on any Sun diall.

age.	☾	at South	
1	16	12	48
2	17	1	36
3	18	2	24
4	19	3	12
5	20	4	0
6	21	4	48
7	22	5	30
8	23	6	24
9	24	7	12
10	25	8	0
11	26	8	48
12	27	9	36
13	28	10	24
14	29	11	12
15	30	12	0

For the hour of the Night.

The Moon shining upon any Sun diall, mark her shadow, and if it be past the hour of 12. add thereunto the Moons southing, gotten by this Table, and the Sun is the hour of the night; but what hours and minutes it wants of 12 substract from the Moons southing, and the remainder is the hour of the night. You must substract so many minutes as there be halfe hours past 12. and add so many minutes as be halfe hours, as the shadow wants of 12.

Of

AN APPENDIX.

Or, the latter part of this *Almanack*, for this present year 1661.

Courteous Reader,

HAving written many Books of this sort heretofore; and also having been earnestly perswaded yearly by persons of worth and quality, as also common Artificers, for their assistance in proceeding to their attaining of the noble Sciences of Astronomy, and Geometry, to deliver some expressions, and brief Expositions of some Astronomical and Geometrical terms, necessary for the furtherance of their intent and purpose. Which request now at length, I am willing to perform, instead of things of less value in my former Books expressed; remembring that noble saying of an Antient Author, *Non nobis nati sumus, sed partim patriæ, &c.*

Cosmography is the description of the whole World, *viz.* Heaven and Earth, and all that is therein contained; and it comprehendeth four special kinds of Knowledge, *viz.* Astronomy, Astrology, Geography, and Chorography. Astronomy tends to the consideration of the motions and magnitudes of the Heavens and Stars, as well fixed as moveable. Astrology is a Science, which by considering the motions, aspects and influences of the Stars, doth foresee and prognosticate things to come. Geography is the knowledge to describe the whole Earth, and all places therein contained. Chorography is the description of some particular place, as a Region, an Isle, a City, a Town, or the like. So much very briefly of the greater part.

Now of some particulars of the lesser sort; as a Point in Latin *Punctum* is taken to be indivisible, without length, breadth or depth, as this spot • A Line is a length without breadth or deepness; as this ——— a Superficies hath only length and breadth without deep-

nesse. A Plane is a flat, having an absolute like scituation and continuation. An Angle is the concourse of two Lines, or more. A right Angle is the meeting of two Lines, making a true square corner. A sharp Angle or an acute Angle, is lesse then a right, or a square Angle. A blunt Angle is greater then the right or square Angle, and is also called obtuse. A Triangle is a figure of three corners, or Angles. A Circle is a round figure made by turning your Compasses about from the place where you began, until it come to the same place again: It is compared unto the *Idea*, or shape of Gods minde, which hath neither beginning nor ending; The Center or middle point whereof, is every where equally distant from the same Circle. The circumference of a Circle is the very outmost edge thereof being alwaies equidistant from the fixed Center point, as aforesaid. Any part of which circumference, is called an Arch; the quantity whereof is known by the number of degrees it containeth. The Diameter is the longest streight line that can be drawn within a Circle, and passeth through the said Center, from side to side. The Semidiameter of a Circle, is half the Diameter of the same Circle. So much for the definition of some Geometrical terms. Now for a few Astronomical, and so the use and practise of the same.

That the great and vast frame and fabrick of the World is round, may be proved by three Reasons. 1. By the comparison it hath with the chief *Idea*, or shape of Gods mind, as aforesaid. 2. By aptnesse of moving, as well as of containing, for round things move aptest, and contain most. 3. Necessity proveth it to be round, for if it had Angles, Nooks, and Corners it could not be so apt to turn about; and in turning about, it would leave void and empty places; which nature denieth and abhorreth; for no place by nature can be without a body, nor a body without a place. Thus great round frame is turned upon two firm and immovable Hooks, or as it were Hinges, called in Latine *Cardines mundi*, and in Greek *Poli*, derived of *Polo*, to turn, for as the door turneth upon the hooks, or rather the

Wheel

Wheel upon the Axle-tree; so the World turneth upon these two Poles, whereof the one is fixed in the North, and the other in the South. The North Pole is called *Polus arcticus*, and the South Pole called *Polus antarcticus*, through which Poles, from the one to the other, passeth a right imaginative Line, called the Axle-tree of the World, about which it turneth continually, as aforesaid.

Furthermore, it is to be understood, that this huge Fabrick or Frame, called the World, containeth Eleven Spheres or Heavens, called the Celestial Part; which are these ascending, first, the *Moons* sphere; secondly, the sphere of *Mercury*; thirdly, the sphere of *Venus*; the fourth, the sphere of the *Sun*; the fifth, the sphere of *Mars*; the sixth, the sphere of *Jupiter*; the seventh, the sphere of *Saturn*; the eighth, the sphere of the fixed Stars, commonly called the Firmament; the ninth, called the Second Movable or the Chrystaline Heaven; the tenth, called the First Movable; and the eleventh is called the Imperial Heaven, where God and his Angels are said to dwell. The Elemental part containeth the Four Elements, *viz.* The Element of Fire, which is next under the sphere of the *Moon*; and next to that downward, is the Element of Air; and next to that, the Element of Water; and next to that, the Earth, which is the lowest of all; on which we live, move, and have our Being through the mercy and goodness of our good God.

Of the Imperial Heaven.

This heaven (as ancient Divines affirm) is immoveable, and being created the first day by God, was by him immediately replenished with his ministers, the holy Angels, and is most fine, and pure in substance, most round of shape, most great in quantity, most clear in quality, and most high and eminent in place.

Of the tenth Heaven, called in Latine *Primum mobile*, or the first moveable.

This is also of a most pure, clear & transparent sub-

stance, without Stars, and it continually moveth with an equall motion, from East to West: making its Revolution, in 24 hours: being otherwise called the Diurnall, or daily moving.

Of the Ninth heaven:

This heaven is also of a cleare substance, and without Stars, having two movings, the one from East to West, upon the poles of the World, the other from West to East, upon his own poles, turning so slowly about, by the latter motion, that it maketh but one degree in 100 years, and finisheth his full Revolution in 36000 years.

Of the Eighth heaven.

This heaven is otherwise called the firmament, and is, most beautifully adorned with all the fixed Stars which are called fixed, because they are fastned in this spheare, or heaven, like visible knots in a knotted board, having no moving of themselves, but are moved according to the moving of this 8 spheare or heaven, wherein they are fixed. If any demand why all these severall heavens seem to the eye to be but as one entire transparent circle, or one single piece of glasse, that is because they are more clear and transparent like unto fine Birall glasse, or Christall, through which the sight doth easily pierce, though there were never so many coats or covers of such or the same cleare substance, covering one another as the Roles of an Onion: for so do these heavens enclose each other: for if you cut an Onion athwart, and behold the circles therein, you may see a perfect representation of the enclosing of the said heavens one within the other.

Of the thickness of these heavens or spheres wherein each of these forenamed Planets are placed

placed, that of the Moon containeth in thickneſs
105222 miles.

The ſpheare of Mercury containeth 253372
Of Venus. 3274494
Of Sol. 341996
Of Mars. 36308808
Of Jupiter. 1899654
Of Saturn. 19604354

And of neceſſitie, theſe thicknesſes are required: otherwiſe they could not contain each one his Star: for there is no fixed Star ſo little but that it is farre greater in compaſs, then the whole Earth: neither is there any Planet or bounding Star, but that it is greater then the Earth, except the Moon, Venus and Mercury.

For the Sun is greater then the Earth. 166 times
Saturn is bigger then the Earth. 95 times.
Jupiter is bigger then the Earth. 91 times.
Mars is bigger then the Earth 2 times.
Venus is leſſer then the Earth 39 times.

The Moon is the loweſt of the Planets and is leſſer then the Earth 42 times. and is diſtant from the Earth. 48790 miles.

Thus have I briefly touched, ſome ſuch neceſſary termes, definitions, and appellations, as I was earneſtly deſired, being as an Introduction, to the deſirers purpoſe. And now to the practick part of Geometricall operation.

Such a combination, and affinitie there is betweene Arithmetick & Geometry, that the whole nature, and property of the one cannot well be conceived and taught without the other, as appeareth by thoſe figurate numbers, that do participate of both

natures. Whereupon some have called it a Geometrical number. Now a Figure, as Euclide saith, is contained with one or more bounds; as a circle contained with one line called a periphirie, a triangle bounded with 3 lines, a quadrate with 4 lines. Also, in solid bodies as a cube bounded with 6 equal superfices, and a prisma bounded with 6 unequall superfices; a rational figure is that which being multiplied of two numbers, the product thereof sheweth the Area; as for example, suppose a court or quadrangle were to be measured, the one side being 14, the other 12, multiply these sides, the one by the other, viz. 14 by 12, the product being 168, is the Area or superficiall content thereof in Inches, Feet, Yards, Ells, Rodes or Perches according to your intent to denominate. For places according to their divers nature and qualitie are measured by divers and sundry pieces of measure, afore recited. Now these measures being defined by Act of Parliament, I will acquaint you with the words of the Statute (for your further satisfaction.) It is ordained, saith the Statute that 3 Barly corns dry and round do make an Inch, 12 Inches do make a Foot, 3 Foot do make a Yard, 5½ Yards and an half do make a Perch, 40 Perches in length and 4 in breadth do make an Acre. Edw. I. ye. 3. By the Foot for measure Timber, Board and Glasse, a Foot therefore of flat measure, is a rectangled Square, 12 Inches long, and 12 Inches broad, viz. a Foot of Board is a plane, containing 144 square Inches, for such is the product of 12 by 12. Observe that the breadth is easily had, the length not so easie, unless the breadth be 12 Inches, for then so much in length set doth for a Foot square, but if the breadth happen to be more or less then 12, the length de-

sired

freed is not so easily found: for some Art must then be had for the finding out of the length. Admit the breadth given were 9 Inches, hold with you unto the length 144 Inches, you must divide 144 by 9 and your quotient will be 16 Inches, the length desired, the like must you do with every other breadth.

But because many that desire this practice of measuring, are not sufficiently experienced in Arithmetick, I have for their sake, and for their aid added this Table.

Breadth in Inches.	Inches in length	parts of Inches.
1	144	0
2	72	0
3	48	0
4	36	0
5	28	9
6	24	0
7	20	7
8	18	0
9	16	0
10	14	5
11	13	1
12	12	0
13	11	1
14	10	3
15	9	7
16	9	0
17	8	5
18	8	0
19	7	7
20	7	2
21	6	10
22	6	6
23	6	3
24	6	0

The use of this Table.

Find the breadth of your board or glasse in the Columne on the left hand, and over against the same in a right line, you have the length of a foot in Inches, and parts of Inches.

Example, against 9 Inches, is placed 16 Inches, and 0 parts of one Inch, and is much to the length of a Foot.

Also 10 Inches, against which standeth 14 Inches, and 5 parts, so much is the length of a Foot.

Likewise 20 Inches against which is 7 Inches, 2 parts for a Foot, and so of the rest.

An English Pile containeth
1560 Yards
5280 Feet
63360 Inches
190080 Barley Corns.

An Acre
Poles 160
Yards 4840
Feet 43560
Inc. 627264

Of measuring Timber by the foot.

By the Foot we do measure Timber, but Timber being a solid body of three dimensions, viz. length, breadth and thickness, by a Foot of Timber we understand here a Cube of 12 Inches square; that is, a Foot of Timber doth containe 1728 square Inches. Here commonly two dimensions are given; to wit breadth and thickness; the length is sought; if a square piece of Timber be 12 Inches thick and 12 Inches broad, ther's no question but 12 Inches of length must make a Foot. Yea every 12 Inches of that piece shall make a Foot of Timber. But if the breadth and thickness do vary never so little from these two cases nominated by the Statute, although the breadth be equall to the thickness, because its above or under 12 Inches, here presently ariseth a question, what length is required to make a square Foot of that breadth and thickness. For although many Carpenters have upon their Rules, or upon some peece of parchment or paper measures supposed to be true; yet by calculating the one false, and pricking out the other by an other Rule that is not true, many errors are committed, as some of their own company have confessed. Now because that all men, that have occasion to use this skil of measuring, do not understand how these Tables or Rules be made, I think it not amiss here to set down by the former grounds, as I have done before for board-measure, the manner of calculating and making the same; the Rule for calculation therefore, whereby this is performed, is thus. If by the product of the breadth and thickness given, you divide the Cube of 12, that is, 1728 Inches, the quotient will shew the length required, to make a Foot of Timber.

The sorts of Timber which are to be measured, are

are commonly called Parallelle pipida oblonga: long squares or Cylinders, round trees unsquared, for the former I have in some briefe manner handled. And now concerning the latter, namely the Cylinder or unsquared peice of Timber; The way commonly used (though not very true) is to gird the round pieces of Timber with a string, and so doubling the string to take the fourth part thereof for the true square thereof. For example, suppose a Tree be 48 Inches about, by girt Measure, and 12 Inches to be reckoned for the true square thereof: but this is very false, as you may see by some little Circle being cast up after the former common way. Suppose the compass to be 44 Inches, and the diameter of the same 14 Inches; and this is according to that Rule, as 7 to 22, so the diameter to the compass. Therefore multiply the half of the compass being 22. by half the diameter which is 7, the true content will be 154 Inches. Whereas if you had taken a quarter of the compass which is 11, for the square root of the Circle, this multiplyed in it selfe, would yeild but 121 Inches, which wants 33 Inches of the true content, so that there would be lost above a fift part thereof, and so of any other round Timber measured by this erroneous common rule. I say somewhat above a fifth part will be given away. All that can be said in defence of this custome is, that although most Trees grow round, yet they must be hewed square, before they can be fit Timber, which causeth waste considerable. But, for the ease and benefit of the unskilfull, I am willing to adde this Table of Timber measure, which will very much pleasure the practiser.

A Table for measuring square Timber.

Square	10 inches foo inc.	12½ o foo. inc.	25 ¼ quart. foo. inc.	37½ o foo. inc.	50 h. I. inc. foo. inc.	62½ o foo. inc.	75 ¾ quart. foo. inc.	87½ o foo. inc.
3	16 00	14 9	13 7	12 7	11 9	10 11	10 3	9 7
4	9 00 inc. par.	8 6 inc. par.	8 0 inc. par.	7 6 inc. par.	7 1 inc. par.	6 9 inc. par.	6 5 inc. par.	6 1 inc. par.
5	69 12	65 79	62 70	59 82	57 13	54 62	52 27	50 7
6	48 07	47 6	44 23	42 52	40 90	39 38	37 93	36 56
7	35 20	34 4	32 88	31 77	30 72	29 72	28 77	27 88
8	27 00	26 18	25 39	24 64	23 92	23 23	22 57	21 94
9	21 34	20 75	20 20	19 66	19 15	18 65	18 18	17 72
10	17 28	16 86	16 45	16 6	15 68	15 31	14 96	14 61
11	14 28	13 96	13 65	13 36	13 7	12 78	12 51	12 25
12	12 00	11 76	11 52	11 29	11 6	10 85	10 64	10 53
13	10 22	10 4	9 85	9 66	9 48	9 31	9 14	8 98
14	8 82	8 66	8 51	8 36	8 22	8 7	7 95	7 82
15	7 69	7 56	7 44	7 31	7 19	7 6	6 96	6 86
16	6 75	6 65	6 55	6 45	6 35	6 25	6 16	6 7
17	5 98	5 89	5 80	5 72	5 64	5 56	5 49	5 41
18	5 34	5 26	5 19	5 12	5 4	4 98	4 92	4 85
19	4 79	4 72	4 66	4 60	4 54	4 48	4 43	4 37
20	4 32	4 26	4 20	4 16	4 11	4 6	4 1	3 96
21	3 91	3 86	3 82	3 77	3 73	3 69	3 65	3 61
22	3 57	3 53	3 49	3 45	3 41	3 37	3 34	3 30
23	3 27	3 23	3 20	3 16	3 13	3 9	3 6	3 3
24	3 0							

The use of this Table.

First find out the number of Inches, that your square piece of Timber is of, on the left side of this Table

Table under the title of square, and in the next Column thereunto adjoyning over against the same you have your length desired. If the square of your peice be even Inches. But if it be Inches and quarters, or Inches, quarters, and halfe quarters, (then as before) find the whole Inches on the left hand of this Table, right against which toward the right hand proceed untill you come under the other parts of your square, whether it be half quarter, as under 12 2 or quarters under 25. or half Inches as 50, &c. and you have your length desired. And you must further observe, that 100 of these parts make one Inch. Example, suppose a peice of Timber be 3 Inches square, you may finde over against the same 16 Foot, for the length of the Foot; if 3 Inches and a half quar. square, then 14 Foot and 9 Inches in length makes a Foot. if 3 Inches and half square, then 11 Foot and 9, &c. so the like of any square from 3 Inches unto 24 Inches.

Certain briefe Notes concerning the year and the parts thereof.

Annus solaris, the Solar year is the space of time in which the Sun departing from any part of the Ecliptick line, cometh to the very same point again. The Astronomers doe make divers divisions of the Solar year; First saying, that it is either Astronomicall or Politicall. Secondly the Astronomicall year is either Tropicall, or Syderal. Thirdly, the Tropicall is either equall or unequall. All which kinds have in a manner one self definition, saving that the Tropicall year taketh its beginning from the vernall Equinoctiall point, and the Syderall year from the former Star of the Rams horn. and do differ chiefly in quantity. The former containeth

365 dayes,

365 dayes, 5 hours 49′ 15″ and 46‴ the latter contains 365 dayes 42 38′ 27″′

The Julian year, is that which we use at this present day, which of all other years draweth nigheſt the Tropicall year; for this conſiſteth of 365 dayes, and ſix hours, which ſix hours, if it ſhould be reckoned every year, it would breed a great confuſion, and therefore it is reckoned at the end of every fourth yeare, which year conſiſteth of 366 dayes For 4 times 6 hours makes 24 hours, which is one whole naturall day, whereof that yeare is called the Leap year, and this Julian yeare is ſaid to be twofold, viz. Common and Biſſextile, the firſt containing 365 dayes. the latter 366 dayes, and this word Biſſextile is compound of bis and ſextus, becauſe the ſixth day, next before the Kalends of March, is twice repeated, which is the 25 of February, upon which day the Feaſt of St Matthias then falleth. The yeare containeth twelve moneths of the Sun, thirteen moneths of the Moon, fiftie two weeks &c.

Furthermore, there be two Cardinal Circles or Revolutions of years, upon the knowledge whereof all the operations both of the Julian and Gregorian Kalender do depend. The firſt is the Circle of the Sun, or the Revolution of 28 years, in which time the Dominicall or Sunday letters are carried round, ſo that all the poſitions of the Sun, and all the feſtival ſolemnities of the Church, are upon the ſame dates of the week that they were on 28 years before. The other is the Circle of the Moon for the ſpace of 19 years, in which the Moon returns to the ſelf ſame day of the Sun that ſhe was in 19 years before, which hath cauſed ſome folkes too fondly to affirm that the Almanack Calculated for this year will ſerve again in every point exactly this time 19 years

years to come, and so forward yearly quite along, which is most untrue. It is called the Golden Number, because it was wont to be written in the Calender in letters of Gold, right at that day whereon the Moon changed.

For the satisfaction of those who affirm that Shrove-Sunday is alwaies in February; and that the Moon constantly changeth in that moneth, to remove this their mistake, I have adjoyned this Table, by which observing only the Golden Number, they may know when the Moon changeth in February, and when not.

New Moons in February, Moneth days.

11, 00, 19, 8, 27, 17, 5, 23, 12, 2, 20, 9, 00.

Golden Number or Prime.

7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19.

And observe that whensoever the Golden Number is 8, there will be no change of the Moon in February that year, unless B shall be the Dominicall letter that same year, and then the change will fall in the forenoon of the first day, as it was 1603. and as it will be 1698, then the Moon will change the first day of February in the forenoon, which changes notwithstanding we repute to be in January, because we reckon the day to begin at noon (according to the order and Custome of Astronomers) and therefore Quinquagesima or Shrove Sunday in both those years, and all others of the same kinde, falls not untill the 6 of March following, which is five weeks after.

Of the natural causes of Watry Meteors.

Of Rain.

Rain is a cold vapor, an Earthly humor drawn up from the Earth and waters by vertue of the Sun, into

into the middle Region of the Air, where through the extremity of cold, it is thickned into the body of a cloud, and after being dissolved, falleth upon the Earth, and watereth the same, & maketh it fruitful.

Of the Rainbow.

The Rainbow is made by the sun-beams, striking upon the hollow cloud, when their edge is repelled, and beaten back against the sun, by the mixture of clouds, air and fire light together, thereupon appeareth a variety of admirable beautiful colors pleasant to behold.

Of Frost and Dew.

It is a cold moist vapor, a little way drawn up in the day time, through the faint heat of the Sun, presently at night it descendeth again upon the Earth, and is called Dew, but if by means of extream cold it be congealed and frozen, it becometh frost.

Of Hail.

In the dissolving of a cloud into water, as it were into drops of Rain, these drops freezing, in the falling maketh Hail; the higher it cometh, the bigger and rounder at the fall.

Of Snow.

Snow is a moist vapor, drawn into the middle Region of the Air, then condensed in a cloud, in descending thence through the cold Region freezeth, and lyeth a certain time upon the Earth, and is there dissolved into water again, as it was before.

Of Wind.

Wind is nothing else but many exhalations drawn from the Earth, and inforced here and there, and runneth sliding along upon the face of the Earth.

Of Earthquakes.

Plenty of winds gotten into the bowels, holes, and caves of the Earth, by the violent breaking forth of them openeth the ground, and at the closing thereof again

again, causeth the same to quake, or as 'twere totter or shake. And therefore much quiet in the Air, and long silence of winds, are evident token of Earthquakes.

Of Thunder and Lightning.

Thunder is an exhalation hot and dry, mixed with moisture, carried up into the middle Region of the Air, and there inclosed in the body of a Cloud; now those two contraries, Fire and Water, being shut up together in one Room cannot agree, but fall at strife, till they have broken the Prison wherein they are shut; so that the Fire and Water cracking the Cloud with great violence, break out thereof, making that loud noise that we call Thunder; and the Fire is the Lightning, the Thunder is first, though the Lightning be first seen; and why so? because the Sense of Seeing is before the Sense of Hearing, as for instance for the first, you see or rather hear what rumbling noise the red-hot Iron maketh being put into the Smiths cooling trough: And for the latter, you may see the fire when a piece is discharged before you can hear the report. And you must note, that there are many sorts of Lightnings; that which is dry, doth not burn but cleave, rent, and tear, divide and part; that which is moist burneth not likewise, but blasteth and changeth the colour or complexion, but that which is clear is of a strange operation, full vessels are emptied by it, without perishing the vessel; it melteth money in the Purse, and breaketh the Sword in the Scabbard, yet not breaking either Purse or Scabbard, melteth Wax; it breaketh and disjointeth the Bones within the flesh, yet breaketh not the Flesh: many such like dangerous effects it produceth, too long hereto

Of the Comets or Night-flames.

A Comet is a flame mounting in a dry hot fiery exhalation, drawn up into the highest part of the Air, there being set on fire, being a combustible substance, continueth flaming, and sparkling, until all its matter be consumed, and then it ceaseth flaming.

Of the Suns Eclipse.

The Eclipse of the Sun is nothing else but the direct putting of the body of the Moon between our sight and the sun, which happeneth onely at the change. By this it may be gathered, that the darkness at Christs death was not natural, but supernatural, because it then was Full Moon, as Scriptures witness, which inforced Dionisius Areopagita at the time of his passion, to speak thus. Aut Deus naturæ patitur, aut mundi machina dissolvetur.

Of the Moons Eclipse.

The Eclipse of the Moon is, because the Sun is then in a contrary point to the Moon, then being at full inforceth the shadow of the Earth to obscure some part of her light from our sight.

Memorable Chronologies.

Since the Norman Conquest.	595
Since the expulsion of the Danes.	619
Since the entrance of the Danes.	875
Since Hengistus, and the Erection of the Saxon Kingdom	1185
Since the departure of Proconsul Actius, and the Roman Legions.	1261
Since Christs Nativity.	1661

Of the circuits of England and Wales.

Henry the Second toward the end of his Reign, divided his whole Kingdom into Six several Circuits, and for the Administration of Justice, and tryal of causes betwixt men and men, for the better ease and comfort of his Subjects, he appointed certain Judges twice in every year, to ride and to travel through these Circuits, which course and order is carefully continued unto this day. *Henry* the Eighth did the same in the Principality of *Wales*, which he divided into three Circuits and appointed Itenerary Judges to ride through them twice a year, and to administer Justice in *England* and *Wales*. A day natural is 24 hours artificial from Sun rising to Sun-set, an hour 60 min. half, 30 min. a quarter of an hour 15 min, 3 quarters of an hour, 45 min.

A certain Rule for finding the true South point.

In some open place set a smooth board perfectly level, with the Horizon, then with a pair of compasses make 3 or 4 Circles one within an other, as large as your board will permit; in the Center erect a wire truly perpendicular, in length a fourth part of your Circles diameter, the Sun shining in the forenoon; when the point of the shadow toucheth any one Circle, just in that touch make a marke, then wait in the afternoon untill the point of the shadow touch the same Circle, and in the same touch make an other marke; now divide these two marks in the just middle with your compass, and draw a line from the Center to this middle point, and it shall be the true Meridian.

Of Weights and Measures.

In *England* we use two sorts of Weights, *viz.* the one called *Troy*, the other *Avoir du poiz*, or over weight. Now the least portion of weight is a Barly corn, taken out of the midst of the eare and dry. 24 of these grains make one penny weight; I mean not a penny weight of our Silver, but Goldsmiths weight, which is 3 pence of our Silver. 20 peny weight make one ounce *Troy*, and 12 ounces make one pound *Troy*; *Avoir du poiz* is by Custome, (the other by Law) and this hath 16 ounces to the pound, every ounce having 20 peny weight, every penny weight having 21 grains and 9 or 10 of a grain. The hundred weight is 112. halfe 56. quarter 28 with these few weights 1. 2. 4. 7. 1. 4. 28. 56. you may weigh just an hundred pound, or any weight under.

The worth of Gold.

		L.	S.	D.	F.
One pound weight	is worth	40	0	0	0
One ounce		3	6	8	0
One peny weight		0	3	4	0
One grain		0	0	1	2

Worth of Silver.

		L.	S.	D.	F.
One pound weight	is worth	3	0	0	0
One Ounce weight		0	5	0	0
One peny weight		0	0	3	0
One grain		0	0	0	1

Hereafter followeth an excellent ready Table for such as buy or use retayling such commodities, as are bought or sold at 112 pounds in the hundred.

Pound price. D.	q.	Hundreds price. L.	S.	D.	Pound price. S.	D.	q.	Hundreds price. L.	S.	D.	Pound price. S.	D.	q.	Hundreds price. L.	S.	D.
0	1/4	0	2	4	0	7	1/4	3	7	8	1	2	1/4	6	13	0
0	1/2	0	4	8	0	7	1/2	3	10	0	1	2	1/2	6	15	4
0	3/4	0	7	0	0	7	3/4	3	12	4	1	2	3/4	6	17	8
1	0	0	9	4	0	8	0	3	14	8	1	3	0	7	0	0
1	1/4	0	11	8	0	8	1/4	3	17	0	1	3	1/4	7	2	4
1	1/2	0	14	0	0	8	1/2	3	19	4	1	3	1/2	7	4	8
1	3/4	0	16	4	0	8	3/4	4	1	8	1	3	3/4	7	7	0
2	0	0	18	8	0	9	0	4	4	0	1	4	0	7	9	4
2	1/4	1	1	0	0	9	1/4	4	6	4	1	4	1/4	7	11	8
2	1/2	1	3	4	0	9	1/2	4	8	8	1	4	1/2	7	14	0
2	3/4	1	5	8	0	9	3/4	4	11	0	1	4	3/4	7	16	4
3	0	1	8	0	0	10	0	4	13	4	1	5	0	7	18	8
3	1/4	1	10	4	0	10	1/4	4	15	8	1	5	1/4	8	0	0
3	1/2	1	11	8	0	10	1/2	4	18	0	1	5	1/2	8	3	4
3	3/4	1	15	0	0	10	3/4	5	0	4	1	5	3/4	8	6	8
4	0	1	17	4	0	11	0	5	2	8	1	6	0	8	8	0
4	1/4	1	19	8	0	11	1/4	5	5	0	1	6	1/4	8	10	4
4	1/2	2	2	0	0	11	1/2	5	7	4	1	6	1/2	8	12	8
4	3/4	2	4	4	0	11	3/4	5	9	8	1	6	3/4	8	15	0
5	0	2	6	8	0	12	0	5	12	0	1	7	0	8	17	4
5	1/4	2	9	0	1	0	1/4	5	14	4	1	7	1/4	8	10	8
5	1/2	2	11	4	1	0	1/2	5	16	8	1	7	1/2	9	2	0
5	3/4	2	13	8	1	0	3/4	5	19	0	1	7	3/4	9	4	4
6	0	2	16	0	1	1	0	6	1	4	1	8	0	9	6	8
6	1/4	2	18	4	1	1	1/4	6	3	8	1	8	1/4	9	11	0
6	1/2	3	0	8	1	1	1/2	6	6	0	1	8	1/2	9	11	4
6	3/4	3	3	0	1	1	3/4	6	8	4	1	8	3/4	9	13	8
7	0	3	5	4	1	2	0	6	10	8	1	9	0	9	16	0

The excellent use of this precedent Table followeth.

Observe that there be three larger Columns in this Table, distinguished into five other lesser columns; the Column under pound, doth manifest the price of the pound weight, according to the rate of the hundred; as for *Example*, If I pay 2*l.* 4*s.* 4*d.* for the Hundred of Hops, Cheese, or any other commodity, the pound weight whereof cometh to four pence; three farthings, the pound, and so the rest in like manner.

A briefe Rule whereby you may know how much your dayly expence cometh to in the year. Suppose you spend two pence a day, it cometh to two pounds, two halfe pounds, two groats, and two pence in the year. Again, six pence a day, cometh to six pounds, six halfe pounds, six groats, and six pence; which riseth to 9*l.* 2*s.* 6*d.* in the year: the like of any other number of pence.

Tables of simple Interest at six per Cent.

Lib.	I. Months.			II. Months.			III. Months.			IV. Months.			V. Months.			VI. Months.		
	L.	*S.*	*D.*	*L.*	*S.*	*D.*	*L.*	*S.*	*D.*	*L.*	*S.*	*D.*	*L.*	*S.*	*D.*	*L.*	*S.*	*D.*
1000	5	0	0	10	0	0	15	0	0	20	0	0	25	0	0	30	0	0
900	4	10	0	9	0	0	13	10	0	18	0	0	22	10	0	27	0	0
800	4	0	0	8	0	0	12	0	0	16	0	0	20	0	0	24	0	0
700	3	10	0	7	0	0	10	10	0	14	0	0	17	10	0	21	0	0
600	3	0	0	6	0	0	9	0	0	12	0	0	15	0	0	18	0	0
500	2	10	0	5	0	0	7	10	0	10	0	0	12	10	0	15	0	0
400	2	0	0	4	0	0	6	0	0	8	0	0	10	0	0	12	0	0
300	1	10	0	3	0	0	4	10	0	6	0	0	7	10	0	9	0	0
200	1	0	0	2	0	0	3	0	0	4	0	0	5	0	0	6	0	0
100	0	10	0	1	0	0	1	10	0	2	0	0	2	10	0	3	0	0

Instructions for the using of these Tables of Interest.

In the Column of the left hand, you have the several sums of money from 1000*l.* to 1*l.* inclusively; the twelve months at the head; *Lib.* standing for pounds, D for pence, S for shillings, &c.

As for *Example*: I would know the Interest of 900*l.* for six moneths, I find 900 in the first Row leftward, and the six months at the head, and with the meeting of the Sum with the time of six months, and under the same you have 27*l.* your desire, and so of the rest.

Lib.	VII. Months			VIII. Months			IX. Months			X. Months			XI. Months			XII. Months		
	L.	S.	D.	L.	S.	D.	L.	S.	D.	L.	S.	D.	L.	S.	D.	L.	S.	D.
1000	35	0	0	40	0	0	45	0	0	50	0	0	55	0	0	60	0	0
900	31	10	0	36	0	0	40	10	0	45	0	0	49	10	0	54	0	0
800	28	0	0	32	0	0	36	0	0	40	0	0	44	0	0	48	0	0
700	24	10	0	28	0	0	31	10	0	35	0	0	38	10	0	42	0	0
600	21	0	0	24	0	0	27	0	0	30	0	0	33	0	0	36	0	0
500	17	10	0	20	0	0	22	10	0	25	0	0	27	10	0	30	0	0
400	14	0	0	16	0	0	18	0	0	20	0	0	22	0	0	24	0	0
300	10	10	0	12	0	0	13	10	0	15	0	0	16	10	0	18	0	0
200	7	0	0	8	0	0	9	0	0	10	0	0	11	0	0	12	0	0
100	3	10	0	4	0	0	4	10	0	5	0	0	5	10	0	6	0	0

Simple Interest at six direct per Centum.

Lib.	I. Month			II. Months.			III. Months			IV. Months.			V. Months.			VI. Mont		
	L.	S.	D.	L.	S.	D.	L.	S.	D.	L.	S.	D.	L.	S.	D.	L.	S.	
90	0	9	0	0	18	0	0	27	0	1	16	0	1	5	0	1	14	
80	0	8	0	0	16	0	1	4	0	1	12	0	1	0	0	1	8	
70	0	7	0	0	14	0	1	1	0	1	8	0	0	15	0	1	2	
60	0	6	0	0	12	0	0	18	0	1	4	0	0	10	0	0	16	
50	0	5	0	0	10	0	0	15	0	1	0	0	0	5	0	0	10	
40	0	4	0	0	8	0	0	12	0	0	16	0	0	0	0	0	4	
30	0	3	0	0	6	0	0	9	0	0	12	0	0	15	0	0	18	
20	0	2	0	0	4	0	0	6	0	0	8	0	0	10	0	0	12	
10	0	1	0	0	2	0	0	3	0	0	4	0	0	5	0	0	6	

Lib.	VII. Months			VIII. Months			IX. Months			X. Months			XI. Months			XII. Mont		
	L.	S.	D.	L.	S.	D.	L.	S.	D.	L.	S.	D.	L.	S.	D.	L.	S.	
90	1	16	0	3	4	0	3	12	0	4	0	0	4	8	0	4	16	
80	1	12	0	2	16	0	3	3	0	3	10	0	3	17	0	3	12	
70	1	8	0	2	8	0	2	14	0	3	0	0	3	6	0	3	12	
60	1	4	0	2	0	0	2	5	0	2	10	0	2	15	0	3	0	
50	1	0	0	1	16	0	2	0	0	2	0	0	2	4	0	2	8	
40	0	16	0	1	12	0	1	16	0	2	0	0	2	12	0	1	16	
30	0	12	0	1	8	0	1	7	0	1	10	0	1	13	0	1	16	
20	0	8	0	1	4	0	1	2	0	1	0	0	1	2	0	1	4	
10	0	4	0	0	12	0	0	18	0	0	10	0	0	11	0	0	12	

Simp

Simple Interest at Six in the Hundred.

Lib.	I. Moneths S.	D.	II. Months S.	D.	III. Months S.	D.	IIII. Months S.	D.	V. Month S.	D.	VI. Months S.	D.
9	0	10 4/5	1	9 3/5	2	8 2/5	3	7 1/5	4	6 0	5	4 4/5
8	0	9 3/5	1	7 1/5	2	4 1/5	3	2 1/5	4	0 0	4	9 3/5
7	0	8 2/5	1	4 4/5	2	1 1/5	2	9 3/5	3	6 0	4	2 2/5
6	0	7 0	1	2 2/5	1	9 2/5	2	4 4/5	3	0 0	3	7 1/5
5	0	6 1/5	1	0 0	1	6 0	2	0 0	2	6 0	3	0 0
4	0	4 4/5	0	9 3/5	1	2 2/5	1	7 1/5	2	0 0	2	4 4/5
3	0	3 3/5	0	7 1/5	0	10 4/5	1	2 1/5	1	6 0	1	9 3/5
2	0	2 2/5	0	4 4/5	0	7 1/5	0	9 3/5	1	0 0	1	2 2/5
1	0	1 1/5	0	2 2/5	0	3 1/5	0	4 4/5	0	6 0	0	7 1/5

Lib.	VII. Moneths S.	D.	VIII. Months S.	D.	IX. Months S.	D.	X. Months S.	D.	XI. Months S.	D.	XII. Months S.	D.
9	6	3 3/5	7	2 2/5	8	1 1/5	9	0 0	9	10 4/5	10	9 3/5
8	5	7 1/5	6	4 4/5	7	2 2/5	8	0 0	8	9 3/5	9	7 1/5
7	4	10 4/5	5	7 1/5	6	3 3/5	7	0 0	7	8 2/5	8	4 4/5
6	4	2 2/5	4	9 2/5	5	4 4/5	6	0 0	6	7 1/5	7	2 2/5
5	3	6 0	4	0 0	4	6 0	5	0 0	5	6 0	6	0 0
4	2	9 3/5	3	2 2/5	2	7 1/5	4	0 0	4	4 4/5	4	9 3/5
3	2	1 4/5	3	4 4/5	2	8 2/5	3	0 0	3	3 3/5	3	7 1/5
2	1	4 1/5	1	7 1/5	1	9 3/5	2	0 0	2	2 2/5	2	4 4/5
1	0	8 2/5	0	9 3/5	0	10 4/5	1	0 0	1	1 1/5	1	2 3/5

The length of England from Lizard point to Berwick, 334 Miles.

The breadth from Dover to Holy-head, is 250 Miles.

Ireland containeth in length 400 Miles.

In breadth 200 Miles.

Solstitium Cancer, faciunt & Cornua Capræ;
Libra dies Pernusque Aries cum noctibus æquant.
Pallida Luna pluit. rubicunda flat, alba serenat.

A

A Table of the Kings and Queens of *England*.

Their Names	Years of Birth.	Began to Reign.	Reign'd Y.	Reign'd M.	Ended their Reign.
Will. Conquer.	2023	1066 Octob. 14	20	11	1087 Septemb. 9
William Rufus	1057	1087 Septem. 9	12	11	1100 August 1
Henry 1	1068	1100 August 3	35	4	1135 Decemb. 1
K. Stephen	1105	1135 Decemb. 1	18	11	1154 Octobr. 25
Henry 2	1132	1154 Octob. 25	35	9	1189 July 6
Richard 1	1155	1189 July 6	9	9	1199 April 6
K. John	1165	1199 April 6	17	6	1216 Octob. 19
Henry 3	1207	1216 Octob. 19	56	1	1272 Novemb. 16
Edward 1	1239	1272 Novemb.	34	8	1307 July 7
Edward 2	1283	1307 July 7	19	6	1327 January 25
Edward 3	1313	1326 Janu. 25	51	5	1377 July 21
Richard 2	1366	1377 June 22	22	3	1399 Septemb. 29
Henry 4	1367	1399 Sept. 30	13	6	1413 March 20
Henry 5	1384	1413 March 20	9	5	1422 August 31
Henry 6	1421	1422 Aug. 31	38	6	1461 May 4
Edward 4	1440	1461 March 4	22	1	1483 April 9
Edward 5	1471	1483 April 21	00	2	1483 June 22
Richard 3	1448	1483 June 28	2	2	1485 August 22
Henry 7	1455	1485 Aug. 22	23	11	1509 April 22
Henry 8	1491	1509 April 22	37	9	1547 January 28
Edward 6	1537	1547 Janu. 28	6	5	1553 July 6
Qu. Mary	1515	1553 July 6	5	4	1558 Novemb. 17
Qu. Elizabeth	1533	1558 Novem. 17	44	4	1603 March 24
K. James	1566	1603 March 24	22	0	1625 March 27
K. Charles	1600	1625 March 27	23	11	1649 January 30
K. Charles 2 to Reign.	1630	1648 Jan. 30	Whom God grant long		

This Table is very useful in searching out the Antiquity of ancient Evidences, that are dated by the year of some of these Kings Reigns, and not by the year of our Lord. *Example*, Since the 25 year of King *Henry* the third, how long? it is found thus. Looke for the year in the Table that he began to reign, which are 1116. to which adde the 25 years, which make 1141. which substract from this present year 1660, and the remainder is the time since, viz. 519. your desire; so the like for any other.

Pro-

Profitable directions.

Remove Trees in *September*, *October*, or *November*, the Moon in ♈. ♎ and ♑ and be sure to set that side of the Tree to the South againe, that was at or toward the South before, sow seeds of round Roots, as Onions, Turnips, Pompions and the like, three or four dayes before the Full. Geld Cattel, the Moon in *Aries*, *Sagittarius* or *Capricorn*; after the Full Shear Sheep; cut hair, and sow all manner of seeds and grain, the Moon increasing.

Dung Lands to destroy Weeds in the last quarter, gather the flowers and seeds you intend to keep all the year, at the Full, and the like for Herbes, dry them first in the shadow, then in the Sun.

Gather fruits in a dry afternoon, put every sort of your fruit by it self: let them be gathered in the last quarter of the Moon: put not the bruised nor the fallings among the rest.

Fell Timber to build from Midsummer till Twelfe-tide, the Moon decreasing.

England	Length	386	Miles.
	Breadth	276	
	Compasse	1572	
Ireland	Length	303	
	Breadth	279	Miles.
	Compasse	948	
Wight	Length	28	
Man.	Breadth	18	Miles.
	Compasse	91	
Anglesey	Length	21	
	Breadth	18	Miles.
	Compasse	85	

Man

Isle of Wight.	Length	32	
	Breadth	11	Miles.
	Compasse	57	

Vrout, Regnet, Pracur, Carolus Poen Semper.

Many one desire to have the Ruler, Yard, or Water-leaf in the first page mentioned, upon intelligence thereof given unto this Author, he may (by him) be furnished at an easie rate.

If any Herbick Spirit or generous Gentleman be desirous to beautifie his understanding with the laudable ornaments of *Mathematical* knowledge, he may be instructed (if he please) by this Author, who is well experienced in these practices following.

Architect, the making of fixed Dyals, both in Mettal and durable Colours in divers formes.

Item, the making and use of all sorts of portable and instrumental Dyals, viz. *Quadrants*, *Quadrat*, *Ring-dyals*, *Cilinder dyals*, and also the making and use of that *Baculum horarium*, or Staff-dyal devised some 40 years past, by this Author: of excellent use.

Item, the use of Globes, Spheres in plano; the *Mathematical* Jewel, Mr. *Gunters* Sector, &c. and many other such *Mathematical* Instruments, Geometry, or Land measuring, with the plain Table, Theodolite, Circumferetor, Mr. *Hoptons* Geodetical Staffe, &c.

The use of Sines, Tangents and Secants, and the Art of Dialling thereby performed with great certainty, and facility. *Arithmetick* with its parts, which is the ground of all Sciences. *Non nobis nati sumus, Deo soli laus omnis & gloria tribuatur.*

PIGOT.

A Medicinall Dispensatory containing the whole body of Physick, composed by the Illustrious *Renodæus*, chief Physician to the King of *France*, Englished by *Richard Tomlinson*. Sold by *G. Sawbridge*.

FINIS.